



# Human Factors

research and technology division



## Debriefing Flight Training and Operations

### Objective

To develop methods by which flight crews can debrief themselves in order to learn the most from flight simulation training and from line operations.

### Approach

Line Oriented Flight Training (LOFT) is used by airlines to provide continuing training to enable aircrews to manage effectively the challenges of line operations in both normal and abnormal situations. With the guidance of an instructor, crews debrief themselves after LOFT to analyze what happened, why it happened, what they did well, and how they might improve their performance. We have completed a study that analyzes these debriefings and have prepared a training manual with which instructors can learn how best to facilitate self analysis by crews. We are currently working with members of the operational community to show:

- (i) how crews can enhance performance by debriefing themselves following line operations
- (ii) how safety departments can use facilitated debriefs to help crews understand and resolve problems resulting in safety deviations, and
- (iii) how companies can use facilitated debriefs to help employees deal with the emotional shock following accidents and critical incidents.

### Impact

Our facilitation training manual is being used by many major airlines, the USAF, and a variety of organizations in other settings. For example, one airline reprinted the manual and gave copies to all of its 1000 instructors, who in turn provide initial and recurrent training to all of the airline's pilots. The work underway will extend the impact of this initial study. The net result is that crews will be able to learn more from their experiences in training and on the line and be able to operate more safely without sacrificing operational objectives such as on-time performance.

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